



Flexitricity

Monetising flexibility in
ELECTRIC VEHICLES

1.

THE OPPORTUNITY

Electric vehicles (EVs) are a fast-growing, distributed, flexible energy resource. This presents both a challenge to networks and an opportunity for suppliers and customers.

Flexitricity helps you to take advantage of this opportunity by enabling you to successfully monetise flexibility from your network of connected assets.

We offer a behind-the-scenes real-time optimisation service to a range of partners, including:

- **Domestic energy suppliers**
- **EV hub operators (council-run and private)**
 - **EV fleet owners**
- **Smart charging providers**



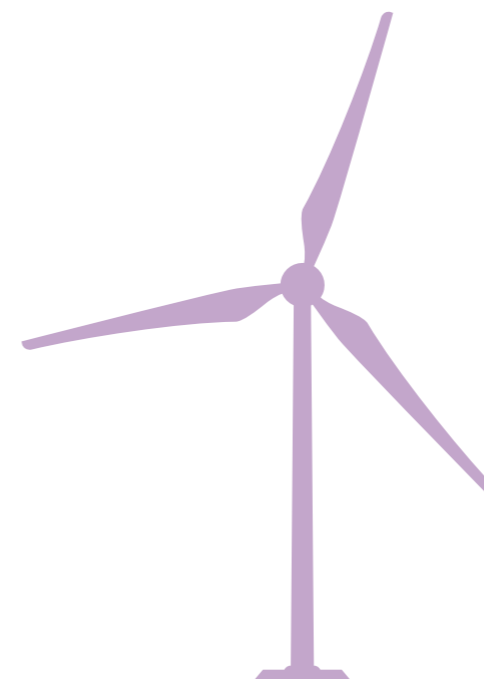
2.

WHY PARTICIPATE?

The near-complete electrification of transport is not only an essential part of net zero; it also creates a resource with the capability to balance itself. This gives you (and your customers) the opportunity to play a part in creating a greener and fairer energy system, all the while earning from doing so.

Generate revenue

In today's energy system, flexibility is hugely valuable. Flexitricity's services enable you to monetise that flexibility in your network of EVs.

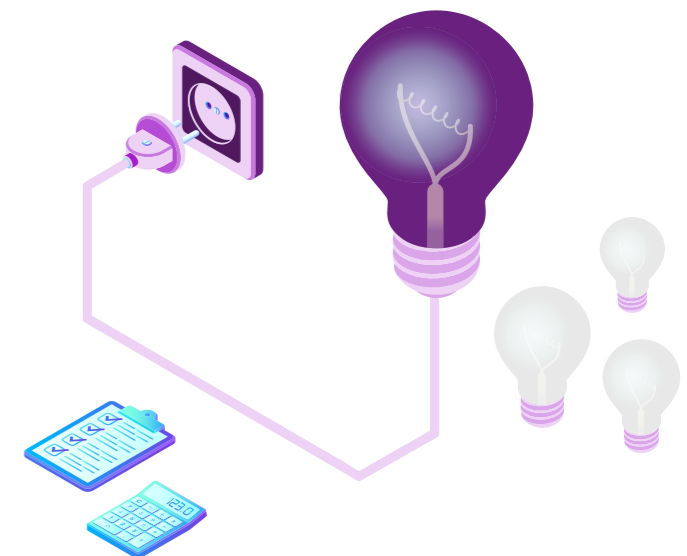


Support the renewable energy revolution

As our energy system decarbonises, National Grid will need more flexibility on the system to help balance varying renewable generation.

Stand out

Working with Flexitricity enables you to be at the forefront of the EV revolution and take advantage of all the latest innovations.





3.

SERVICES

National Grid procures flexibility through a range of services. All of these have a threshold for participation — often 1MW. **Flexitricity enables all sizes and types of flexible assets, including EVs, to participate by aggregating your assets with others in our virtual power plant.**

From our 24-hour control room, we run the most complete set of demand response services in Britain. That means we can find the revenue opportunities that are the best fit for your business. This is always done in a way that suits your EV customers, ensuring they retain full control.

The most lucrative options change from time to time between different services. However, the growth in renewable generation and the decline in fossil fuels means that the overall value of flexibility is growing.

Each partner is recommended a **bespoke package of services** in order to optimise value from their available assets.

We work with both V1G and V2G opportunities:

Smart charging (V1G): We schedule charging to help minimise charging costs, make the units available to National Grid, and also adjust charging to help encourage greater use of renewable energy to avoid wasting it.

Vehicle to grid (V2G): We utilise bidirectional charging — where the car battery can be charged and discharged — to adjust charging behaviour based on National Grid's requirements for balancing the energy system.

BALANCING MECHANISM (WIDER ACCESS)

Balancing Mechanism Wider Access is one of the main routes by which EV network owners and domestic energy customers can earn value from their flexibility.

When electricity generation and consumption are not in balance, National Grid uses the Balancing Mechanism (BM) to purchase changes in generation and consumption to correct the mismatch close to real time. It's an ad hoc merchant market with no long-term forward commitments.

Historically the BM has been dominated by large energy suppliers and generators. Now, as the country moves towards its 2050 net zero carbon targets, National Grid ESO and Elexon have made changes to encourage smaller, more agile energy assets to contribute. This has resulted in a new route to market - BM Wider Access. Flexitricity helped to pioneer this opportunity and was the first provider to utilise it.

Energy supply and time-of-use tariffs:

We can optimise flexibility in your network of assets, regardless of which energy supplier you/your customers are with and the tariff they're on, including time of use dynamic tariff.

We also work directly with domestic energy suppliers to help them optimise flexibility for their customers.

DNO SERVICES

As the system evolves, distribution network operators (DNOs) are becoming more active in the procurement of flexibility services to manage constraints and avoid or defer infrastructure spend. This creates a lucrative opportunity for all types of flexibility, including EVs.

For DNOs, location matters more than anything else. Flexitricity is continuously monitoring the markets and will make our customers aware of any DNO tenders in the region their asset(s) are located in.

STOR

Assets participating in short-term operating reserve (STOR) are deployed via Flexitricity's control room to either increase generation or reduce demand, when National Grid needs reserve energy to help them respond to any unexpected mismatch in supply and demand.

Flexitricity works closely with each site to determine for how many hours and when they wish to make their assets available. Our large portfolio enables optimal aggregation of customer assets to achieve the best price combination.

Flexitricity is the most experienced STOR aggregator in Britain and our unmatched experience in this market has enabled us to maximise STOR revenue for the sites in our portfolio for 12+ years.

4.

HOW DOES IT WORK?

Flexitricity helps you establish how much flexibility your network of EVs is able offer, which services are the best fit, and how much you can earn. If required, we then aggregate your site(s) with other assets in our virtual power plant to allow participation. Flexitricity manages the market access strategy, in consultation with you, and dispatches your assets, all from our manned 24/7 control room.



Consultation & revenue illustration

At the outset, we spend time working with you to learn about your unique requirements — each partnership is different. At this stage we also prepare a revenue illustration giving you an overview of how much you can earn.



We connect your EVs / EV management platform to our control room via an API. Our API specification is supplied free of charge as we operate on a revenue share basis and we don't charge management / upfront fees.

Engineering & onboarding



Operation & optimisation

We discuss and agree with you the best operational strategy for your assets. Our operations team and trading desk monitor your assets and the energy markets 24/7 and adjust the strategy as needed to maximise your revenue. Your account manager will be available to answer any questions you might have and provide regular updates.



We help you keep up to date with the latest market developments and ensure you're aware of any new opportunities. Our account managers ensure Flexitricity's customers not only receive the best possible service but are first in line to gain access to new revenue streams.

Innovation & expansion

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The process of working with Flexitricity has been seamless. We've been supported every step of the way. Their professionalism and reliability have been second to none.

Jim Gillon

Energy Services Manager
Gateshead Council

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TOP FAQs

1. How much money can an EV charge point make from being flexible?

Revenue potential is dependent on a number of factors. For example, we would need to know more details about the expected charging regime (fleet, domestic, on-street), when the charge point would be available in flexibility markets, and where it's located. Furthermore, some EV charge points may be able to participate in DNO flexibility services which adds an additional revenue stream. That's why we only provide revenue estimates on a case-by-case basis. Contact us today to find out how much your site could earn!

2. Is an EV customer ever going to have a flat car when they need to drive?

Absolutely not. Individual chargers will only be made available for flexibility services when it suits the customer.

3. Do you work directly with individual EV customers?

No, Flexitricity doesn't contract directly with individual EV users. We work through channel partners who have multiple charge points in their network and accessible on their own platform. Flexitricity then collaborates with these third parties to develop an API between Flexitricity's virtual power plant and partner's platform. This gives us a pool of EV chargers with availability fluctuating throughout the day — individual chargers will only be made available to this pool of flexibility when it suits the customer.

4. Do sites have to be half-hourly metered to allow participation?

Sites need to be half-hourly metered for participation in Balancing Mechanism. Sites, including domestic households, can request to be half-hourly metered through their energy supplier. In some cases those on time-of-use tariffs are already half-hourly metered.

5. Can EV customers opt out/change their preferences?

Yes, Flexitricity ensures that customers remain in control and can use their vehicles as desired.

6. Does it place more wear and tear on the car batteries?

No. Flexitricity is currently only flexing the EV charge point, i.e. asking it to charge or stop charging when flexibility is required, but always working towards the target state of charge that the customer needs. We are currently participating in the Electric Nation Vehicle-to-Grid (V2G) trial which will investigate how V2G impacts wear and tear with voluntary trial participants.

7. Can you flex around time-of-use tariffs?

Yes. We are working with our smart grid platform partners to develop price signals that allow us to be flexible around the customer's time-of-use tariffs.

8. Can an EV user change their energy supplier?

Yes. The consumer right to switch supplier is always protected. Our route to flexibility markets is interoperable with all suppliers as our processes are associated with the customer meter, not the supply contract. If a channel partner has a commercial relationship with a supplier (or is a supplier) we may be able to access additional value.

9. Why is Balancing Mechanism Wider Access important?

Through the introduction of Virtual Lead Parties (VLPs) as part of Balancing Mechanism Wider Access, National Grid ESO has opened up access to this real-time balancing market for all sources of electrical flexibility. This is a huge opportunity for a range of flexible assets, including EV networks.

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We decided to partner with Flexitricity for their unrivalled expertise in monetising flexibility and their focus on innovation. I have no doubt they will add a lot of value to the Electric Nation project.

Mike Potter

CEO
CrowdCharge

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PARTNERSHIPS



By partnering with Flexitricity we are able to offer energy suppliers an advanced trading service that reduces their cost, benefits the grid, the environment, and delivers better value to their customers.

William Goldsmith

Head Commercial & Grid Services

ev.energy





7.

WHY FLEXITRICITY?

Flexitricity is the demand response pioneer. We provide clarity amidst complexity, and an assurance of delivery backed by our unbeatable track record in the industry.

- We've been dispatching aggregated flexibility longer than anyone else in the GB market and have built a strong reputation based on **honesty and reliability**.
- We receive consistently **great feedback** from our customers; our most recent survey shows that over 96% of participants think our teams are 'extremely responsive' or 'very responsive'.
- We offer **access the widest range of energy market opportunities and balancing services** — you can rest assured you're not missing out.
- We are aware of (and often driving) changes, new services and **innovation** in the industry. That means we can offer our customers access to new revenue streams as and when they become available, and **often ahead of anyone else in the market**.
- We have a track record of **maximising revenue**, including securing excellent coverage and high prices in balancing services and the Balancing Mechanism.
- We utilise the latest research and best practice in machine learning, engineering and IT systems. This has helped us maintain our market-leading position over the last decade and develop our **unique price optimisation algorithms**.
- Flexitricity helped to develop and was one of the first to join **Flex Assure** — the independent code of conduct scheme for the demand side response industry.

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The EV revolution will connect millions of ‘batteries with wheels’ to the grid in the next decade. By using AI-driven charging technology, we can intelligently manage these fleets of batteries, charging at the lowest cost, and from the lowest carbon energy.

Flexitricity’s expertise in grid services and dispatching flexibility has been invaluable and we’re delighted to be working with them.

Chris Wright

Chief Technology Officer

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Flexitricity

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